FIG. 1

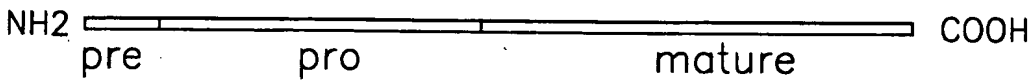


FIG.2

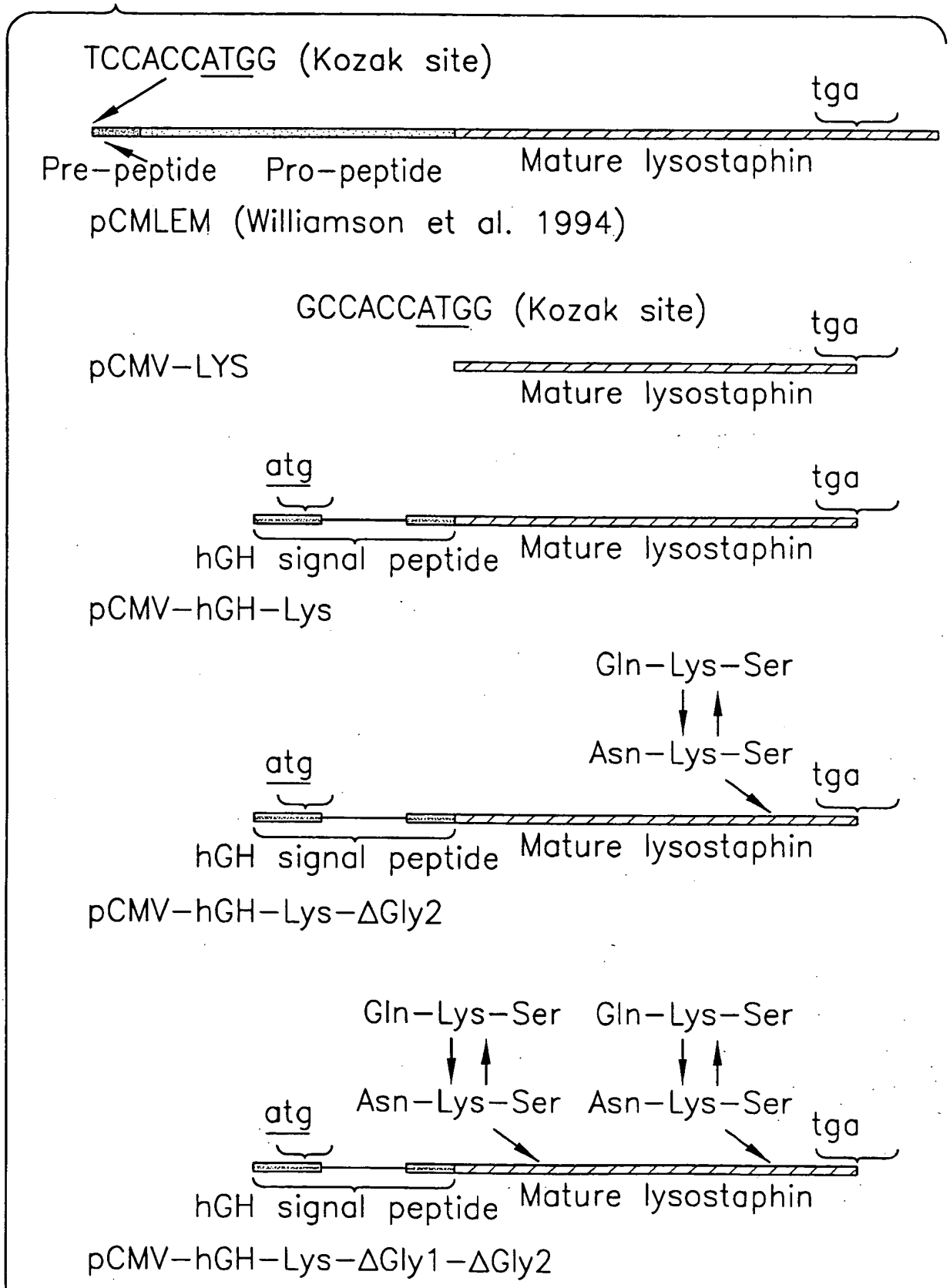

TCCACCATGG (Kozak site)
tga
Pre-peptide
Pro-peptide
Mature lysostaphin
pCMLEM (Williamson et al. 1994)
GCCACCATGG (Kozak site)
tga
pCMV-LYS
Mature lysostaphin
atg
tga
hGH signal peptide
Mature lysostaphin
pCMV-hGH-Lys
Gln-Lys-Ser
Asn-Lys-Ser
atg
tga
hGH signal peptide
Mature lysostaphin
pCMV-hGH-Lys-ΔGly2
Gln-Lys-Ser
Gln-Lys-Ser
Asn-Lys-Ser
Asn-Lys-Ser
atg
tga
hGH signal peptide
Mature lysostaphin
pCMV-hGH-Lys-ΔGly1-ΔGly2

FIG. 3

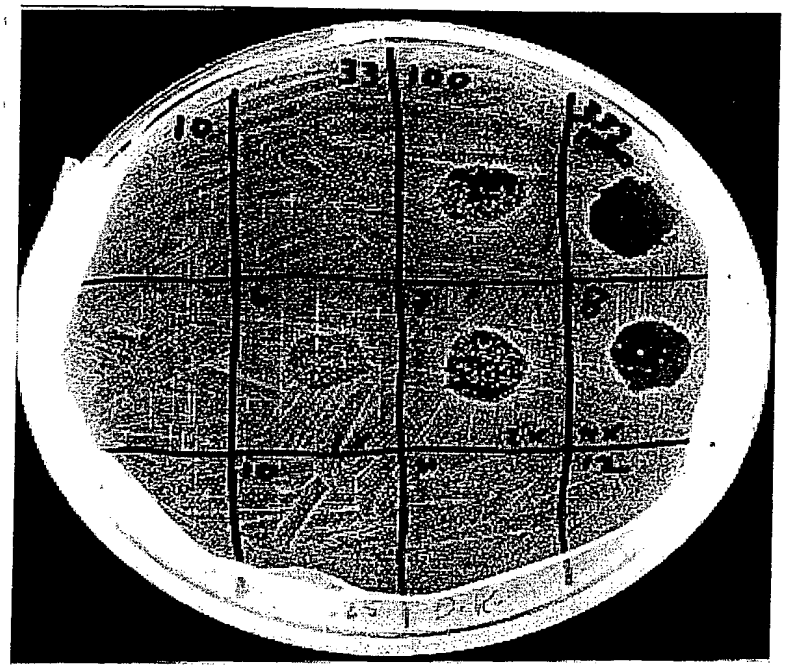
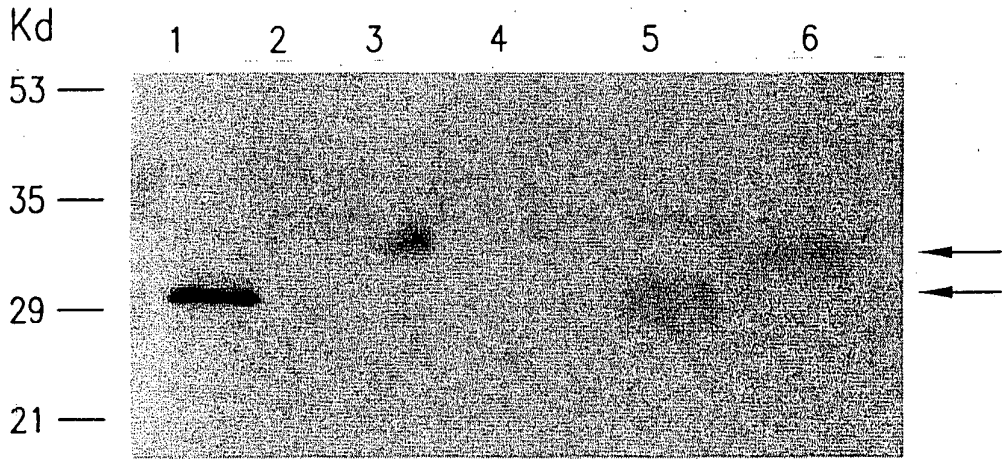


FIG.4

Plasmid		GH	Lys	GH	Lys	Lys
Reaction buffers	−	−	−	+	+	+
N−Glycosidase−F	−	−	−	−	+	−



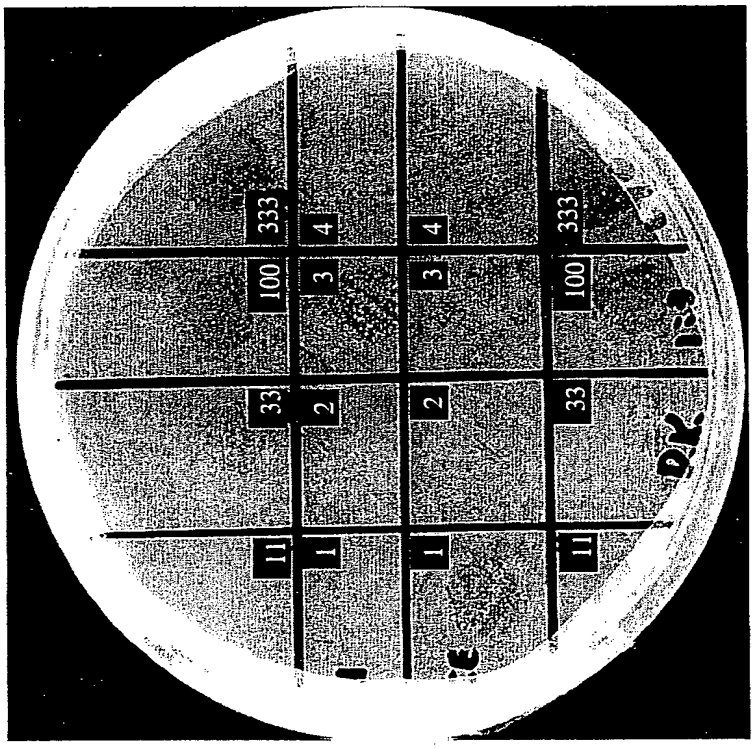

11
1
2
33
100
333
4
3
2
1
11
33
100
333
4
3
2
1
Standard
Media
Cell Extract
Lyoph. Standard

FIG.5

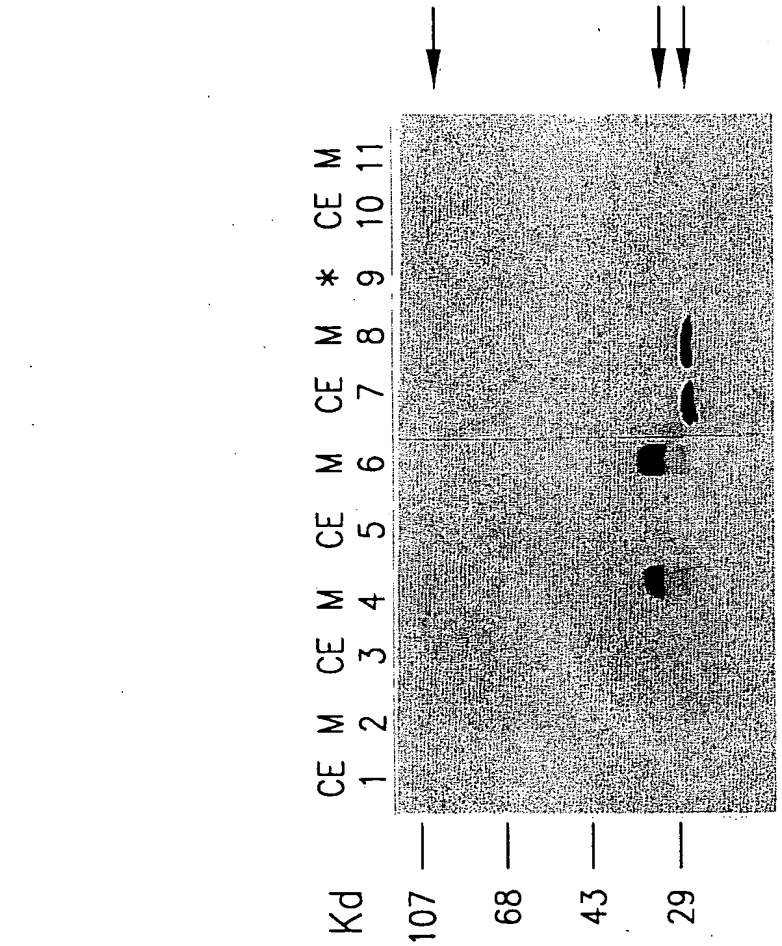


FIG.6

FIG. 7A

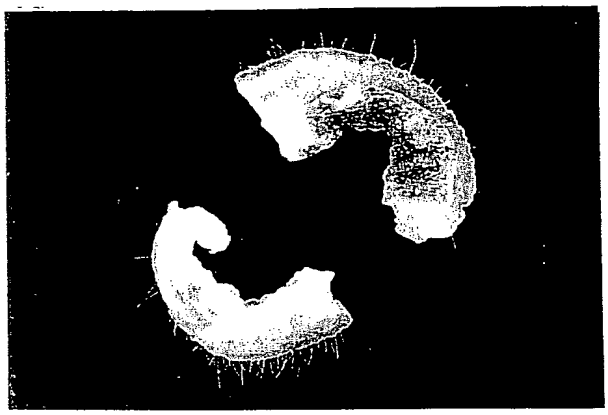


FIG. 7B

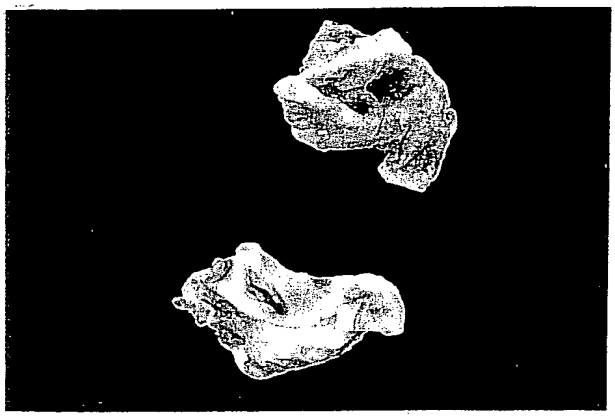


FIG. 7C

FIG. 7D

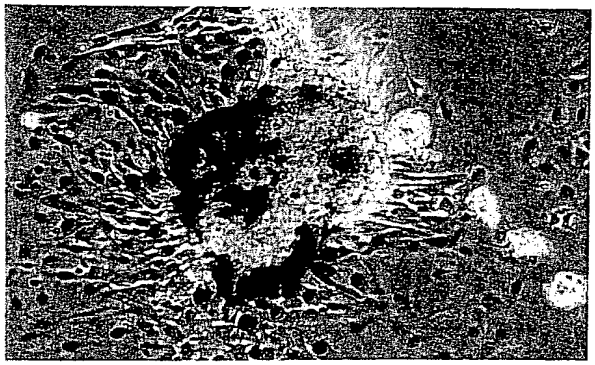


FIG. 7E

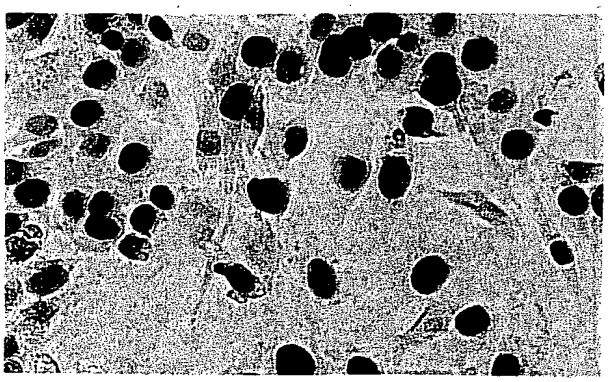


FIG. 7F

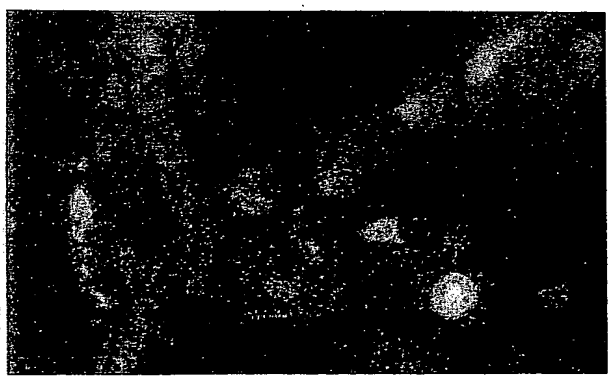


FIG.8

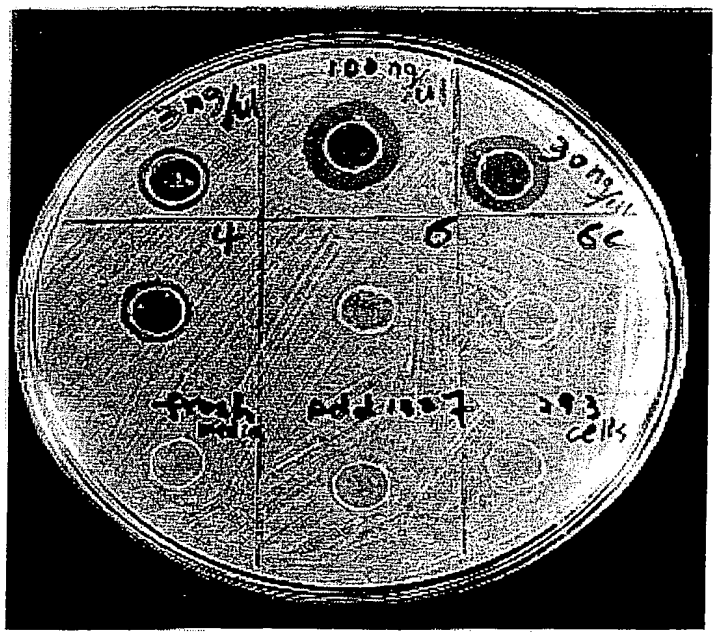


FIG.9

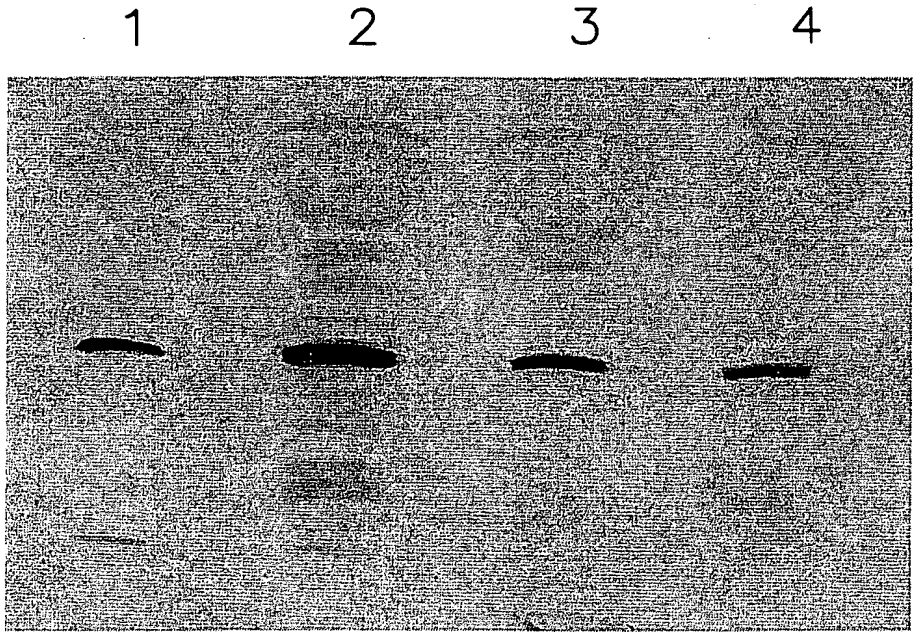


FIG. 10

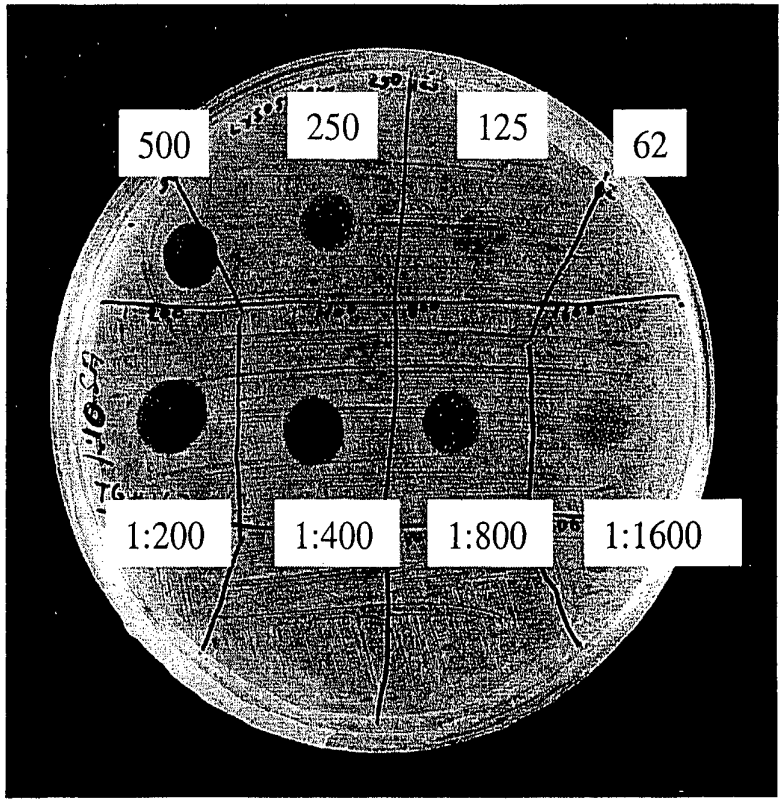

Lysostaphin (ng/ml)
500
250
125
62
Dilutions of Transgenic Milk
Dilutions of Control Milk
1:200
1:400
1:800
1:1600

FIG. 11-1

A.
ORIGIN

```
      1 ccggaactct tgaatgttta gttttgaaaa ttccaaaaaa aaacctactt tcttaatatt
     61 gattcatatt attttaacac aatcagttag aatttcaaaa atcttaaagt caatttttga
    121 gtgtgtttgt atatttcatc aaaatcaatc aatattattt tactttcttc atcgttaaaa
    181 aatgtaatat ttataaaaat atgctattct cataaatgta ataataaatt aggaggtatt
    241 aaggttgaag aaaacaaaaa acaattatta tacgagacct ttagctattg gactgagtac
    301 atttgcctta gcatctattg tttatggagg gattcaaaat gaaacacatg cttctgaaaa
    361 aagtaatatg gatgtttcaa aaaaagtagc tgaagtagag acttcaaaag ccccagtaga
    421 aaatacagct gaagtagaga cttcaaaagc tccagtagaa aatacagctg aagtagagac
    481 ttcaaaagct ccagtagaaa atacagctga agtagagact tcaaaagctc cagtagaaaa
    541 tacagctgaa gtagagactt caaaagctcc ggtagaaaat acagctgaag tagagacttc
    601 aaaagcccca gtagaaaata cagctgaagt agagacttca aaagccctgg ttcaaaatag
    661 aacagcttta agagctgcaa cacatgaaca ttcagcacaa tggttgaata attacaaaaa
    721 aggatatggt tacggtcctt atccattagg tataaatggc ggtatgcact acggagttga
```

To Fig.11-2

FROM FIG.11-1

FIG.11-2

781 ttttttatg aatattggaa caccagtaaa agctatttca agcggaaaaa tagttgaagc
841 tggttggagt aattacggag gaggtaatca aataggtctt attgaaaatg atggagtgca
901 tagacaatgg tatatgcatc taagtaaata taatgttaaa gtaggagatt atgtcaaagc
961 tggtcaaata atcggttggt ctggaagcac tggttattct acagcaccac atttacactt
1021 ccaaagaatg gttaattcat tttcaaattc aactgcccaa gatccaatgc ctttcttaaa
1081 gagcgcagga tatggaaaag caggtggtac agtaactcca acgccgaata caggttggaa
1141 aacaaacaaa tatggcacac tatataaatc agagtcagct agcttcacac ctaatacaga
1201 tataataaca agaacgactg gtccatttag aagcatgccg cagtcaggag tcttaaaagc
1261 aggtcaaaca attcattatg atgaagtgat gaaacaagac ggtcatgttt gggtaggtta
1321 tacaggtaac agtggccaac gtatttactt gcctgtaaga acatggaata aatctactaa
1381 tactttaggt gttctttggg gaactataaa gtgagcgcgc tttttataaa cttatatgat
1441 aattagagca aataaaaatt ttttctcatt cctaaagttg aagctt

To Fig.11-3

FROM FIG.11-2

FIG.11-3

B.
BASE COUNT
ORIGIN

```
  1 gctgcaacac atgaacattc agcacaatgg ttgaataatt acaaaaaagg atatggttac
 61 ggtccttatc cattaggtat aaatggcggt atgcactacg gagttgattt ttttatgaat
121 attggaacac cagtaaaagc tatttcaagc ggaaaaatag ttgaagctgg ttggagtaat
181 tacggaggag gtaatcaaat aggtcttatt gaaaatgatg gagtgcatag acaatggtat
241 atgcatctaa gtaaatataa tgttaaagta ggagattatg tcaaagctgg tcaaataatc
301 ggttggtctg gaagcactgg ttattctaca gcaccacatt tacacttcca aagaatggtt
361 aattcatttt caaattcaac tgcccaagat ccaatgcctt tcttaaagag cgcaggatat
421 ggaaaagcag gtggtacagt aactccaacg ccgaatacag gttggaaaac aaacaaatat
481 ggcacactat ataaatcaga gtcagctagc ttcacaccta atacagatat aataacaaga
541 acgactggtc catttagaag catgccgcag tcaggagtct taaaagcagg tcaaacaatt
601 cattatgatg aagtgatgaa acaagacggt catgtttggg taggttatac aggtaacagt
661 ggccaacgta tttacttgcc tgtaagaaca tggaataaat ctactaatac tttaggtgtt
721 ctttggggaa ctataaagtg a
```

FIG. 12

"MKKTKNNYYTRPLAIGLSTFALASIVYGGIQNETHASEKSNMDV

SKKVAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAE

VETSKAPVENTAEVETSKAPVENTAEVETSKALVQNRTALRAATHEHSAQWLNNYKKG

YGYGPYPLGINGGMHYGVDFFMNIGTPVKAISSGKIVEAGWSNYGGGNQIGLIENDGV

HRQWYMHLSKYNVKVGDYVKAGQIIGWSGSTGYSTAPHLHFQRMVNSFSNSTAQDPMP

FLKSAGYGKAGGTVTPTPNTGWKTNKYGTLYKSESASFTPNTDIITRTTGPFRSMPQS

GVLKAGQTIHYDEVMKQDGHVWVGYTGNSGQRIYLPVRTWNKSTNTLGVLWGTIK"

FIG. 13

ORIGIN

```
  1 gccgcaacac atgaacattc agcacaatgg ttgaataatt acaaaaaagg atatggttac
 61 ggcccttatc cattaggtat aaatggcggt atgcactacg gagttgattt ttttatgaat
121 attggaacac cagtaaaagc tatttcaagc ggaaaaatag ttgaagctgg ttggagtaat
181 tacggaggag gtaatcaaat aggtcttatt gaaaatgatg gagtgcatag acaatggtat
241 atgcatctaa gtaaatataa tgttaaagta ggagattatg tcaaagctgg tcaaataatc
301 ggttggtctg gaagcactgg ttattctaca gcaccacatt tacacttcca aagaatggtt
361 aactcatttt cacagtcaac tgcccaagat ccaatgcctt tcttaaagag cgcaggatat
421 ggaaaagcag gtggtacagt aactccaacg ccgaatacag gttggaaaac aaacaaatat
481 ggcacactat ataaatcaga gtcagctagc ttcacaccta atacagatat aataacaaga
541 acgactggtc catttagaag catgccgcag tcaggagtct taaaagcagg tcaaacaatt
601 cattatgatg aagtgatgaa acaagacggt catgtttggg taggttatac aggtaacagt
661 ggccaacgta tttacttgcc tgtgagaaca tggcagaagt ctactaatac tctgggtgtt
721 ctgtggggaa ctataaagtg a
```

FIG. 14–1

A.
ORIGIN

```
  1 tgtgtgcgtg ctcccattcg ttcatgctcg ccacgcgcac ggccgcgctt tgcgacgcga
 61 tcgcgcaccg tgtgaaccgc attgaggaat ggccgttcgg caagcgcatg tacggcctcg
121 atttgaacgt gcgtcgcacg acagcgtcgc gcccgcggtc agagtccggc gcccgcggta
181 tacggacagc gatcgcggcg tccgccgatg acgaacggtc gtgcgcgtca gtcgcatgcg
241 ccgctcgccg ctggcgttcc ggcttcgcgg gcgcagcgcg gtccaccact cttcaaacgt
301 ctttctcggg agcagcatat gaagaagatt tccaaggcgg gactggggct ggcgctggtg
361 tgcgcgctgg cgacgatcgg cggcaacgca gcgcgcaggg ccacggctca gcggcgagga
421 tctggtgtat tctacgacga gatgttcgac ttcgacatcg atgcgcatct ggccaagcat
481 gcgccgcatc tgcacaagca ctcggaagag atctcgcact gggccggcta cagcgggatc
541 agccgaagtg ttgatcgcgc tgatggagca gcagagcgcg cggtcacgcc aagcgcgcga
601 cgaatcgtcc gttcggcaag ctggcgcgcg ccgacggctt cggcgcgcag acccgcgagg
661 tcgcgctggc gctgcgcgag tcgctgtacg agcgcgatcc cgacgcgcca aggggccggt
721 gacgctggcc cgcgccaatc cgctgcaggc gctgttcgag cgttccggcg acaacgagcc
781 ggcggccgcg ctgcgcggcg acggcgagtt ccagctggtc tacggccgcc tgttcaacga
```

To Fig.14–2

FROM FIG.14-1

FIG.14-2

841 accgcgccag gccaaggcgg cttcggaccg cttcgccaag gccggcccgg acgtgcagcc
901 gtgtcgccca acggcctgct gcagttcccc ttcccgcgcg gcgccagctg gcatgtcggc
961 ggcgcccaca ccaacaccgg ctcgggcaat tacccgatgt cgtcgctgga catgtcgcgc
1021 ggcggcggct ggggcagcaa ccagaacggc aactgggtgt cggcctcggc cgccggctcg
1081 ttcaagcgcc actcttcgtg cttcgcggag atcgtgcaca ccggcggctg gtcgacgacc
1141 tactaccacc tgatgaacat ccagtacaac accggcgcca acgtgtcgat gaacaccgcc
1201 atcgccaacc cggccaacac ccaggcgcag gcgctgtgca acggcggcca gtcgaccggc
1261 ccgcacgagc attggtcgtt gaagcagaac ggcagcttct accacctcaa cggcacctac
1321 ctgtcgggct atcgcatcac cgcgaccggc agcagctatg acaccaactg cagccggttc
1381 tatctgacca agaacggcca gaactactgc tacggctatt acgtcaaccc gggcccgaac
1441 tgaggctcgc cgcgtgcgtt gcccgcgtcc tcaagcgccc cacgcgcggg gcgcgggcac
1501 cggccgggtc aggtcgaatt

FIG. 14-3

B.

"MKKISKAGLGLALVCALATIGGNAARRATAQRRGSGVFYDEMFD

FDIDAHLAKHAPHLHKHSEEISHWAGYSGISRSVDRADGAAERAVTPSARRIVRS

ASWRAPTASARRPARSRWRCASRCTSAIPTRQGAGDAGPRQSAAGAVRAFRRQRAG

GRAARRRRVPAGLRPPVQRTAPGQGGFGPLRQGRPGRAAVSPNGLLQFPFPRGASWHVG

GAHTNTGSGNYPMSSLDMSRGGGWGSNQNGNWVSASAAGSFKRHSSCFAEIVHTGG

WSTTYYHLMNIQYNTGANVSMNTAIANPANTQAQALCNGGQSTGPHEHWSLKQNGSFYH

LNGTYLSGYRITATGSSYDTNCSRFYLTKNGQNYCYGYYVNPGPN"

FIG. 15-1

A.
ORIGIN

```
   1 gaaaattcca aaaaaaaacc tactttctta atattgattc atattatttt aacacaatca
  61 gttagaattt caaaaatctt aaagtcaatt tttgagtgtg tttgtatatt tcatcaaagc
 121 caatcaatat tattttactt tcttcatcgt taaaaaatgt aatatttata aaaatatgct
 181 attctcataa atgtaataat aaattaggag gtattaaggt tgaagaaaac aaaaaacaat
 241 tattatacga caccttttagc tattggactg agtacatttg ccttagcatc tattgtttat
 301 ggagggattc aaaatgaaac acatgcttct gaaaaaagta atatggatgt ttcaaaaaaa
 361 gtagctgaag tagagacttc aaaaccccca gtagaaaata cagctgaagt agagacttca
 421 aaagctccag tagaaaatac agctgaagta gagacttcaa aagctccagt agaaaataca
 481 gctgaagtag agacttcaaa agctccagta gaaaatacag ctgaagtaga gacttcaaaa
 541 gctccggtag aaaatacagc tgaagtagag acttcaaaag ctccggtaga aaatacagct
 601 gaagtagaga cttcaaaagc cccagtagaa aatacagctg aagtagagac ttcaaaagct
 661 ccagtagaaa atacagctga agtagagact tcaaaagctc cggtagaaaa tacagctgaa
 721 gtagagactt caaaagcccc agtagaaaat acagctgaag tagagacttc aaaagctcca
 781 gtagaaaata cagctgaagt agagacttca aaagctccgg tagaaaatac agctgaagta
 841 gagacttcaa aagccccagt agaaaataca gctgaagtag agacttcaaa agccctggtt
```

To Fig.15-2

FROM Fig.15-1

FIG.15-2

901 caaaatagaa cagctttaag agctgcaaca catgaacatt cagcacaatg gttgaataat
961 tacaaaaaag gatatggtta cggtccttat ccattaggta taaatggcgg tatccactac
1021 ggagttgatt tttttatgaa tattggaaca ccagtaaaag ctatttcaag cggaaaaata
1081 gttgaagctg gttggagtaa ttacggagga ggtaatcaaa taggtcttat tgaaaatgat
1141 ggagtgcata gacaatggta tatgcatcta agtaaatata atgttaaagt aggagattat
1201 gtcaaagctg gtcaaataat cggttggtct ggaagcactg gttattctac agcaccacat
1261 ttacacttcc aaagaatggt taattcattt tcaaattcaa ctgcccaaga tccaatgcct
1321 ttcttaaaga gcgcaggata tggaaaagca ggtggtacag taactccaac gcccaataca
1381 ggttggaaaa caaacaaata tggcacacta tataaatcag agtcagctag cttcacacct
1441 aatacagata taataacaag aacgactggt ccatttagaa gcatgccgca gtcaggagtc
1501 ttaaaagcag gtcaaacaat tcattatgat gaagtgatga aacaagacgg tcatgtttgg
1561 gtaggttata caggtaacag tggccaacgt atttacttgc ctgtaagaac atggaataaa
1621 tctactaata ctttaggtgt tctttgggga actataaagt gagcgcgctt tttataaact
1681 tatatgataa ttagagcaaa taaaaatttt ttctcattcc taaagttgaa gcttttcgta
1741 atcatgtcat agcgtttcct gtgtgaaatt gcttagcctc acaattccac acaacatacg
1801 agccggaaca taaagtgcta agcct

FIG. 15-3

B

"MKKTKNNYYTTPLAIGLSTFALASIVYGGIQNETHASEKSNMDV

SKKVAEVETSKPPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAE

VETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKA

PVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTA

EVETSKALVQNRTALRAATHEHSAQWLNNYKKGYGYGPYPLGINGGIHYGVDFFMNIG

TPVKAISSGKIVEAGWSNYGGGNQIGLIENDGVHRQWYMHLSKYNVKVGDYVKAGQII

GWSGSTGYSTAPHLHFQRMVNSFSNSTAQDPMPFLKSAGYGKAGGTVTPTPNTGWKTN

KYGTLYKSESASFTPNTDIITRTTGPFRSMPQSGVLKAGQTIHYDEVMKQDGHVWVGY

TGNSGQRIYLPVRTWNKSTNTLGVLWGTIK"

ORIGIN

FIG.16-1

```
   1 gatatcattt caaagacaga tattctaaag aaaagatata ttttaaaaaa tgtggttgaa
  61 aaaattaaag aaattcacga ttttgactat atatttattg atgtaccacc tactattaac
 121 tctgatttca ctaataatgc tgtttacgca agtgattaca ttttaatggt atttcaaaca
 181 caacaatctg cttatgaaag tagtctttca tttgttaatt ttttaaggga tcgaaaaaaa
 241 gaatcagatt tatcatttga attggttggc gctgttccag tattaattaa aaaaagtgga
 301 cgtgtagata aacagatatt agatatgtct aaatcagcat tttctgaagc actctttgag
 361 aaccagatat atcaaagaga aagaataaaa aaatttgccg ctgatggaat aaaagataaa
 421 gatatgcatg acaaaaaagt tatatatatg tttaacaaag tctacgaaga attagttgat
 481 agagttagat taattgaagg tgagtgatat ttatggcagg atttttagat aacatagata
 541 catctgaggt aaaatatacg gaaaattata aaccggtatc taaaagtacg actatgagag
 601 tggacactga tataaaaaaa agattaaatc aaatggcgtt agataaagat acatctataa
 661 aggctatagt tgatgaagtg ttaggagaat ttttgaaaaa aaataagtat tagtatttta
 721 tataggctct atactattta ggactggtga taatcactag tcctattttt gatacaaaaa
 781 agcgcaatta tctctataat tagaagtatc ctaccaccaa taattaagga aataatgcgc
 841 ctatgtctaa tattatatca atcacccttg gaattaaaga taaaaatatc acttttgaag
 901 ataaggttga agaaagtata aagggaaaaa ttctttattt tactttggaa aattaataca
 961 ttctcccaag cgatgtaaac tttgcggaca cgaaaatacg aacttttcta taatcaaaaa
1021 tggttttaaa aaatcatgtc ttacgatacc taaggtatcg gagaagccag cttatttaat
```

To Fig.16-2

FROM FIG.16-1

FIG.16-2

1081 attggaaaaa cagcgtttcc actgtaaaaa gtgctgcagt tatttcactg ctgaaacacc
1141 tgtcgttgag tggaattgct atatttctca aaacacacga ttagctgtgc tgaataagtc
1201 gatagacata cgttcgcaaa aatctgttgc tgaatcttgt catgtcagta attccacagt
1261 tactcgaata attaataaag ctgcttctca aatagctcaa acaccgttta aatatttacc
1321 ggaacacttg atgatggatg agttcaaaag cgttaaaaat gttgtcggta aaatgagttt
1381 tatttatgca gatgcagtaa cacaccgtat tattgatatt gtgcctgacc gcaggttatt
1441 tgctttgaaa aattatttct accgttatcc tctttctgaa agaaaatgtg tgaaagcagt
1501 gtctattgat atgtatgaac cttatatggc tttgatcaga gaagtttttc ctaatgccaa
1561 aattctaata gttcatttcc atattgttca gtctttaaat aaagccttga acatgactcg
1621 agtaacagtt atgaatagtt tcagaacaac tgaaagacct ctatacaaca agtacaagcg
1681 ttactggaag attcttttaa aactgccttg aaaaatatag aaatcaatag cgttgctcct
1741 aaacttcaaa cagctgttaa aacactaaga aagcacaata gaatgataag aaatactttt
1801 gaatacagta acttgaccaa cggttcactt gagggaataa atactaaaat aaagctgata
1861 cagagaatat cttttggtta tagaaatttt ggtgatttac gcagtcgtat cattttatgt
1921 acaaatcttt ttgcagctaa tccaaaaaaa gagatcaagc aactttatgc tgcttaatct
1981 ctgcgtttta gctcaccagt cttatttgac agagagccaa taaaattaac ggagggagaa

To Fig.16-3

FROM FIG.16-2

FIG. 16-3

2041 ggattcgaac caacgcaagc acatacatgc tcctaattaa taaaaatata ttaatcccct
2101 taatccagac ttgggtatcc ctccacaagc attatttaat gctaatataa catatataac
2161 aacaaatgta aatatgtatt tataaggaaa aggatattaa aattattctg agttatataa
2221 ggtagtattc ataatcatcc taaagttgaa gtcgaaaagc ttcaacttta ggaatgagaa
2281 aaaattttta tttgctctaa ttatcatata agtttataaa aagcgcgctc actttatagt
2341 tccccaaaga acacctaaag tattagtaga tttattccat gttcttacag gcaagtaaat
2401 acgttggcca ctgttacctg tataacctac ccaaacatga ccgtcttgtt tcatcacttc
2461 atcataatga attgtttgac ctgcttttaa gactcctgac tgcggcatgc ttctaaatgg
2521 accagtcgtt cttgttatta tatctgtatt aggtgtgaag ctagctgact ctgatttata
2581 tagtgtgcca tatttgtttg ttttccaacc tgtattcggc gttggagtta ctgtaccacc
2641 tgcttttcca tatcctgcgc tctttaagaa aggcattgga tcttgggcag ttgaatttga
2701 aaatgaatta accattcttt ggaagtgtaa atgtggtgct gtagaataac cagtgcttcc
2761 agaccaaccg attatttgac cagctttgac ataatctcct actttaacat tatatttact
2821 tagatgcata taccattgtc tatgcactcc atcattttca ataagaccta tttgattacc
2881 tcctccgtaa ttactccaac cagcttcaac tatttttccg cttgaaatag cttttactgg
2941 tgttccaata ttcataaaaa aatcaactcc gtagtgcata ccgccattta tacctaatgg

To Fig.16-4

FROM FIG.16-3

FIG.16-4

3001 ataaggaccg taaccatatc ctttttgta attattcaac cattgtgctg aatgttcatg
3061 tgttgcagct cttaaagctg ttctattttg aaccagggct tttgaagtct ctacttcagc
3121 tgtattttct actggggctt ttgaagtctc tacttcagct gtattttcta ccggagcttt
3181 tgaagtctct acttcagctg tattttctac tggagctttt gaagtctcta cttcagctgt
3241 attttctact ggggcttttg aagtctctac ttcagctgta ttttctaccg gagcttttga
3301 agtctctact tcagctgtat tttctactgg agcttttgaa gtctctactt cagctgtatt
3361 ttctactggg gcttttgaag tctctacttc agctgtattt tctaccggag cttttgaagt
3421 ctctacttca gctgtatttt ctaccggagc ttttgaagtc tctacttcag ctgtattttc
3481 taccggagct tttgaagtct ctacttcagc tgtattttct actggagctt ttgaagtctc
3541 tacttcagct gtattttcta ctggagcttt tgaagtctct acttcagctg tattttctac
3601 tggagctttt gaagtctcta cttcagctgt attttctact ggggcttttg aagtctctac
3661 ttcagctact ttttttgaaa catccatatt actttttca gaagcatgtg tttcattttg
3721 aatccctcca taaacaatag atgctaaggc aaatgtactc agtccaatag ctaaaggtct
3781 cgtataataa ttgttttttg ttttcttcaa ccttaatacc tcctaattta ttattacatt
3841 tatgagaata gcatattttt ataaatatta catttttaa cgatgaagaa agtaaaataa
3901 tattgattga ttttgatgaa atatacaaac acactcaaaa attgacttta agatttttga

To Fig.16-5

FROM Fig.16-4

FIG.16-5

```
3961 aattctaact gattgtgtta aaataatatg aatcaatatt aagaaagtag gttttttttt
4021 ggaattttca aaactaaaca ttcaagagtt cgaagaattt gtgtttcaaa aaatgtctca
4081 ttacacacaa tctgcttctc attttgaata tagaaataac catcagaata atgtgcattt
4141 agttggcgta aaaaatgaaa caggtgaagt attagctgct tgtttactga ctgaggcacg
4201 ttgtttaaag ttctttaaat atttctatac acatcgcggt ccagtcatga actttaaaga
4261 ccatgagtta gtcagatttt tttatgaaaa cttaacgacc tatctaaaaa agcaaaactg
4321 cttatatgtt ttaactgacc cttacctgtt agaaaatatt cgaagttgtg acggagaaat
4381 ccttgaatct tatgataacg aaacttttat gaacgtgatg aatttattag gttaccgtca
4441 tcaagggttt actacaggtt attctcaaac aagtcagatc agatggttgt cggtcttaaa
4501 cctagaaaat aaagatgaaa aacaattgtt aaaagaaatg gattatcaaa cacgccgtaa
4561 tattaagaaa acctatgaaa tgcaggtgaa agtccgcgat ttatcaatta atgaaacaga
4621 tcgatttttt aaattattta aaatggctga agaaaaacat ggcttcaaat tcagagaaca
4681 aagttatttt gaaagaatgc agaaaacata cgctgataat agtatgttaa agctggctta
4741 catcgattta gaagaattat tagagacaca aaatgcgaaa gtcgctgagt taaatacaga
4801 tattgaaaat attcaagcgg cattaaaaga aaaccctaat tctaagaaaa acaaaaataa
4861 atatgcgcaa taccaaaagc aattagcagc acaagaacga aaaattactg aaacgaaaaa
```

To Fig.16-6

FROM FIG.16-5

FIG.16-6

4921 attgatagaa acagatggac ctgtattaga cttagctgca gcttactata tctatacccc
4981 tcatgaagtt tactacctat ccagtggttc aaaccctaaa tacaatgcct atatgggtgc
5041 gtacagactc caatgggaaa tgattcaatt tgcgaaaaat aaaggtatta atcgctataa
5101 tttttacggt attacaggag atttcagtga agatgctgaa gatttcggtg ttcaaaaatt
5161 caaagaaggc tttaatgccc atgttgaaga atatgtcggc gacttcatta aaccgattaa
5221 acctttattt tataaaattc atcaattatt aaatagataa ctgaaaatta tttagtcttt
5281 gttaatcaaa tatgacacct caaaatgggt gtgaagagaa ctatattttc aaaggcgtta
5341 atctcgacat cagcgaaggt aaacgttcta gttttacatt cttaactact aagatgctat
5401 aatttggtta acgaagatta tatgcatatt aagcacctac ttccatcgaa aatatcgccg
5461 gaagataaga cgactatatt attataccat ctgtaaatat acaagcatat atacttctga
5521 taacagaacc ttgtagctga tgctggctat ggtagtaaaa gtaaggtttt gtttcaaagt
5581 aaaaaatata gctaaccact aatttatcat gtcagtgttc actcaacttg ctagcatgat
5641 gctaatttcg tggcatggcg aaaatccgta gatctgaaga gatctgcggt tcttttttata
5701 tagaccgtaa atacattcaa taccttttaa agtattcttt gccgtattga tactttgata
5761 ccttgtcttt cttactttaa tatgacggtg gccttgctca ataaggttat tccgatattt
5821 cgatgtacaa tgacagtcat gtttaagttt aaaagcttta atgactttag ccatggctac

To Fig.16-7

FROM FIG.16-6

FIG.16-7

5881 cttcgttgaa ggtgcctgat ctgtaattac cttttgaggt ttaccaaatt gtttaatgag
5941 acgtttgata aacgcatatg ctgaatgatt atctcgttgc ttacgcaagc aaatatctaa
6001 tgtatgggtt ctgtttttta taatacttta gaaaacccag cattatatgt atcactgata
6061 tttatattta tatttcatat aaatacttga acaaaaaatt catatttaat tttctttgtt
6121 gactaacaat atttatttat aagtatttgc tgtcattatt ctaatttatg gaggccgttt
6181 tttatgaact ttaaatattt gtatgagaaa ttttcttgga tgagtcttgc ttggatttta
6241 gtgtcatgca gtgtcttaag tggtattctg actccctttt gggaattcca ataggtatta
6301 ttttaggctt atatttggat ggattactaa aaaaggatgc ttcttgatat taacttaatt
6361 tttaataact ccagctaatt actgttaaag ttgtataatt attaaattaa ggaaacatta
6421 caagaaaagg aaatgcatat ttgtatttcc ttttcttgta atgttataaa aattaagatg
6481 ttatacccta tctttattaa tgctataaac cgtctgcctt gtgatatc

FIG.17

"MKKTKNNYYTRPLAIGLSTFALASIVYGGIQNETHASEKSNMDV

SKKVAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVE

NTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVET

SKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVENTAEVETSKAPVE

NTAEVETSKAPVENTAEVETSKALVQNRTALRAATHEHSAQWLNNYKKGYGYGPYP

LGINGGMHYGVDFFMNIGTPVKAISSGKIVEAGWSNYGGGNQIGLIENDGVHRQWYMH

LSKYNVKVGDYVKAGQIIGWSGSTGYSTAPHLHFQRMVNSFSNSTAQDPMPFLKSAGYG

KAGGTVTPTPNTGWKTNKYGTLYKSESASFTPNTDIITRTTGPFRSMPQSGVLKAGQTIH

YDEVMKQDGHVWVGYTGNSGQRIYLPVRTWNKSTNTLGVLWGTIK"